CLAIMS

1. An electric machine including at least one magnetically inducible structure, said structure comprising at least two magnetically inducible portions, at least one said portion being of laminar construction and at least another said portion being non-laminar in construction, the laminar portion having greater mechanical strength than the non-laminar portion.

2. An electric machine as in claim 1, wherein the laminar portion is arranged to be in a location where its greater mechanical strength is effective to protect the less mechanically strong non-laminar portion.

3. An electric machine as in claim 1, wherein the non-laminar portion is positioned so that it is protected by the laminar portion, which is of greater mechanical strength.

4. An electric machine as in any one of claims 1, 2 or 3 wherein the magnetically inducible structure is a stator of the electric machine.

5. An electric machine as in claim 4, wherein the laminar portion is a frame of the stator of the electric machine.

6. An electric machine as in claim 4, wherein the non-laminar portion is at least one pole piece of the stator of the electric machine.

7. An electric machine as in claim 5, wherein the laminar portion is constructed from electrical steel.

8. An electric machine as in claim 6 wherein the laminar portion of the machine is constructed from bonded iron.

9. An electric machine as in claim 5 or claim 7 wherein each lamination of the frame is of such a shape that, when assembled into the frame, the internal profile of the frame is non-circular in such a way as to maximise the amount of space available for a stator coil.

10. An electric machine as in any one of the preceding claims wherein the electric machine is an electrical motor.

11. An electric machine as in any one of the preceding claims wherein the electric machine is an electrical generator.

12. An electric machine as in any one of the preceding claims wherein the electric machine is an electrical transformer.

13. An electric motor or generator having a stator and a rotor, characterised in that in at least the stator has at least one coil and a core that is magnetically inducible from said coil where the core has at least two parts where one of the parts is of laminar construction and provides a rugged support and a further part is of non laminar construction.

14. A electrical machine of the salient-pole type, wherein the stator of the electric machine comprises a frame supporting salient pole pieces, characterised in that the frame is constructed from laminated electrical steel and the pole pieces are constructed from bonded iron.

15. A method of constructing an electric machine which includes the steps where approximately annular laminations are pressed from magnetically inducible, mechanically strong material,
said laminations are assembled into a frame,
and pole pieces made from a magnetically-inducible material of high electrical resistance are attached to said frame.

16. An electric machine substantially as described in the specification with reference to and as illustrated by any one or more of the accompanying drawings.